

48. (amended) The isolated or purified cell of claim 1, which is an insect cell.

49. (amended) The insect cell of claim 48, wherein said insect cell is of a species selected from the group consisting of:

- (a) *Spodoptera frugiperda*;
- (b) *Tricoplusia ni*;
- (c) *Estigmena acrea*; and,
- (d) *Drosophila*.

50. (amended) The isolated or purified cell of claim 1, which is a yeast cell.

51. (amended) The isolated or purified cell of claim 1, which is a plant cell.

52. (amended) The isolated or purified cell of claim 1, which is a bacterial cell.

53. (amended) The isolated or purified cell of claim 1, which is a fungal cell.

54. (amended) The isolated or purified cell of claim 1, wherein the donor substrate CMP-SA is CMP-Neu5Ac (cytidine monophosphate-*N*-acetylneuraminic acid).

55. (amended) The isolated or purified cell of claim 1, wherein the donor substrate CMP-SA is CMP-KDN (cytidine monophosphate-2-keto-3-deoxy-D-*glycero*-D-*galacto*-nonoic acid).

Please add new claims 56 - 66.

56. The isolated or purified cell of claim 1, wherein said CMP-sialic acid synthase gene and said sialic acid phosphate synthase gene are human.

57. An isolated or purified cell from a recombinant or genetically engineered cell line which contains and co-expresses a CMP-sialic acid synthase gene and a sialic acid phosphate synthase .

gene to produce a donor substrate CMP-SA at a higher level than a cell from a natural cell line corresponding to said recombinant or genetically engineered cell line.

58. The isolated or purified cell of claim 57, which is an insect cell.

59. The insect cell of claim 58, wherein said insect cell is of a species selected from the group consisting of:

- (a) *Spodoptera frugiperda*;
- (b) *Tricoplusia ni*;
- (c) *Estigmena acrea*; and,
- (d) *Drosophila*.

60. The isolated or purified cell of claim 57, which is a yeast cell.

61. The isolated or purified cell of claim 57, which is a plant cell.

62. The isolated or purified cell of claim 57, which is a bacterial cell.

63. The isolated or purified cell of claim 57, which is a fungal cell.

64. The isolated or purified cell of claim 57, wherein the donor substrate CMP-SA is CMP-Neu5Ac (cytidine monophosphate-*N*-acetylneuraminic acid).

65. The isolated or purified cell of claim 57, wherein the donor substrate CMP-SA is CMP-KDN (cytidine monophosphate-2-keto-3-deoxy-D-*glycero*-D-*galacto*-nonoic acid).

66. The isolated or purified cell of claim 57 wherein said CMP-sialic acid synthase gene and said sialic acid phosphate synthase gene are human.